

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph at page 6, lines 21-29, with the following replacement paragraph:

1A. Alignment of Calcipressin Homologs: Primary amino acid sequences of Csp2 (Zaki-4) and Csp1 (DSCR1) homologs of human and mice are shown together with related sequences derived from hamster, worms, and yeast. Note that all sequences share a common, central motif LISPPxSP (SEQ ID NO: 46) as well as other sequence blocks suggesting the common origin of these genes. (SEQ ID NOs: 4-11). Murine Csp1 is the homolog of human DSCR1 and hamster Adapt78, while murine Csp2 is more closely related to human ZAK1-4. Csp homologs throughout the metazoan evolution were identified in a search of GenBank, including *C. elegans*, *S. pombe*, and *S. cerevisiae*.

Please replace the paragraph at page 54, lines 3-14, with the following replacement paragraph:

In certain embodiments, the calcineurin antagonists of the invention comprise the polypeptide sequence RR. In preferred embodiments, the calcineurin antagonists of the invention comprise a polypeptide sequence RRP; or, more preferably, the sequence RRPZ (SEQ ID NO: 47), wherein Z is any amino acid residue other than a serine or a threonine; or, still most preferably, RRPY (SEQ ID NO: 48), wherein Y is an alanine residue, a glycine residue or a glutamic acid residue. In still more preferred embodiments, the calcineurin antagonists comprise an RRPE (SEQ ID NO: 49) motif; or, most preferably, a sequence motif conforming to the general structure PKPKIXQTRRPE (SEQ ID No. 28), wherein P is a proline residue, K is a lysine residue, I is an isoleucine residue, X is any amino acid residue, Q is a glutamine residue, T is a threonine residue, R is an arginine residue, and E is a glutamic acid residue. Examples of two preferred calcineurin antagonists are the peptides PKPKIIQTRRPE (SEQ ID No. 29) and PKPKINQTRRPG (SEQ ID No. 30).

Please replace the paragraph at page 127, lines 20-26, with the following replacement paragraph:

Separate mutations affecting the ERM, RRPE (SEQ ID NO: 49), or other conserved sequence elements such as LIS108, did not prevent Csp1's inhibition of calcineurin-dependent translocation of NF-AT to the nucleus, nor Csp1 binding to calcineurin in vitro. However, when these Csp1 mutants were assessed for their ability to block hydrolysis of pNPP by calcineurin, the one

lacking the RRPE (SEQ ID NO: 49) sequence proved remarkably defective in this assay (Fig. 20). Together, these data suggest that the calcipressins inhibit calcineurin by dual mechanisms involving competition for substrate binding as well as suppression of catalytic activity via the RRPE (SEQ ID NO: 49) "pseudosubstrate" domain.